

Compositions and Methods for Recombinational Cloning of Nucleic Acid Molecules

ABSTRACT

5 The present invention relates generally to compositions and methods for enhancing recombinational cloning of nucleic acid molecules. In particular, the invention relates to compositions comprising one or more ribosomal proteins and one or more additional protein components required for recombinational cloning. More particularly, the invention relates to such compositions wherein the ribosomal proteins are one or more *E. coli* ribosomal proteins, still more particularly wherein the ribosomal proteins are selected from the group of *E. coli* ribosomal proteins consisting of S10, S14, S15, S16, S17, S18, S19, S20, S21, L20, L21, and L23 through L34, and most particularly S20, L27, and S15. The invention also relates to the use of these compositions in methods for recombinational cloning of nucleic acids, *in vitro* and *in vivo*, to provide chimeric DNA molecules that have particular characteristics and/or DNA segments. The invention also relates to isolated nucleic acid molecules produced by the methods of the invention, to vectors comprising such nucleic acid molecules, and to host cells comprising such nucleic acid molecules and vectors.